COMMONWEALTH OF VIRGINIA
Department of Environmental Quality
Northern Virginia Regional Office

STATEMENT OF LEGAL AND FACTUAL BASIS

Covanta Alexandria/Arlington, Inc.
Alexandria, Virginia
Permit No. NVRO71895

Title V of the 1990 Clean Air Act Amendments required each state to develop a permit program to ensure that certain facilities have federal Air Pollution Operating Permits, called Title V Operating Permits. As required by 40 CFR Part 70 and 9 VAC 5 Chapter 80, Covanta Alexandria/Arlington, Inc. has applied for a Title V Operating Permit for its municipal solid waste incinerator with energy recovery facility. The Department has reviewed the application and has prepared a draft Title V Operating Permit.

Engineer/Permit Contact:_____ Date:_____

Air Permit Manager:_____ Date:_____

Regional Permit Manager:_____ Date:_____

FACILITY INFORMATION

Permittee
Covanta Alexandria/Arlington, Inc.
5301 Eisenhower Avenue
Alexandria, VA 22304

Facility
Covanta Alexandria/Arlington, Inc.
5301 Eisenhower Avenue
Alexandria, VA 22304

AIRS ID No. 51-080-0139

SOURCE DESCRIPTION

SIC Code: 4953 – Solid Waste Combustors and Incinerators. The facility is primarily engaged in operating combustors and incinerators for the disposal of non-hazardous solid waste. Electricity and steam are produced as byproducts.

The facility is a Title V major source of sulfur dioxide, nitrogen oxides, carbon monoxide, particulate matter, hydrogen chloride, hydrogen fluoride, dioxins/furans, lead compounds, arsenic compounds, antimony compounds, beryllium compounds, cadmium compounds and mercury compounds. This source is located in a non-attainment area for ozone and an attainment area for all remaining criteria pollutants, and is a PSD major source. The facility was previously permitted under a PSD Permit issued on February 4, 2002.

COMPLIANCE STATUS

The facility is inspected at least once a year. The facility was inspected last November 11, 2000 and March 20, 2001, and was determined to be in compliance.

EMISSION UNIT AND CONTROL DEVICE IDENTIFICATION

The emissions units at this facility consist of the following:

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
Municipal Waste Combustor Equipment							
001-01	001	Faber Combustion Unit Model # unknown (Construction Date Feb. 1988)	51.65 million Btu/hr	---	---	---	February 4, 2002
001-02	001	Keeler/Dorr-Oliver municipal waste combustor with Martin stokers Model # MK 325 (Construction Date Feb. 1988)	121.8 million Btu/hr (Based on a higher heating value of 4500 Btu/lb for MSW)	Asea, Brown Boveri (ABB) Environmental Systems fabric filter Model # 266-14 ABB Environmental Systems spray tower absorber Field Constructed Activated Carbon Injection System Field Constructed Covanta designed Aqueous Ammonia Furnace Injection Field Constructed	01 02 03 13	Particulate Matter and Lead Sulfur Dioxide Mercury Nitrogen Oxides (as NO_2)	February 4, 2002
002-01	002	Faber Combustion Unit Model # unknown (Construction Date Feb. 1988)	51.65 million Btu/hr	---	---	---	February 4, 2002

002-02	002	Keeler/Dorr-Oliver municipal waste combustor with Martin stokers Model # MK 325 (Construction Date Feb. 1988)	121.8 million Btu/hr (Based on a higher heating value of 4500 Btu/lb for MSW)	Asea, Brown Boveri (ABB) Environmental Systems fabric filter Model # 266-14 ABB Environmental Systems spray tower absorber Field Constructed Activated Carbon Injection System Field Constructed Covanta designed Aqueous Ammonia Furnace Injection Field Constructed	05 06 07 14	Particulate Matter and Lead Sulfur Dioxide Mercury Nitrogen Oxides (as NO_2)	February 4, 2002
003-01	003	Faber Combustion Unit Model # unknown (Construction Date Feb. 1988)	51.65 million Btu/hr	---	---		February 4, 2002
003-02	003	Keeler/Dorr-Oliver municipal waste combustor with Martin stokers Model # MK 325 (Construction Date Feb. 1988)	121.8 million Btu/hr (Based on a higher heating value of 4500 Btu/lb for MSW)	Asea, Brown Boveri (ABB) Environmental Systems fabric filter Model # 266-14 ABB Environmental Systems spray tower absorber Field Constructed Activated Carbon	09 10 11	Particulate Matter and Lead Sulfur Dioxide Mercury	February 4, 2002

				Injection System Field Constructed Covanta designed Aqueous Ammonia Furnace Injection Field Constructed	15	Nitrogen Oxides (as NO_2)	
Storage Silos							
004-01	004	Carbon Silo Storage Silo with pneumatic transfer of material (Construction Date Feb. 1988)	2010 ft^3/hr	Fabric Filter	16	Particulate Matter	February 4, 2002
005-01	005	Lime Silo Storage Silo with transfer of lime slurry (Construction Date Feb. 1988)	2548 ft^3/hr	Fabric Filter	17	Particulate Matter	February 4, 2002
Storage Tanks							
006-01	006	Underground Storage Tank for fuel oil (Construction Date Feb. 1988)	20,000 gallons	---	---	---	---

*The Size/Rated capacity is provided for informational purposes only, and is not an applicable requirement.

EMISSIONS INVENTORY

A copy of the 2000 permit application emission inventory is attached as Attachment A. Emissions are summarized in the following tables.

2000 Actual Emissions

	Criteria Pollutant Emission in Tons/Year				
Emission Unit	VOC	CO	SO_2	PM-10	NO_x
001-01 and 001-02	3	19.3	1.2	0.5	187.8
002-01 and 002-02	3	16.6	13.3	0.7	210
003-01 and 003-02	3	20.8	37.5	.94	177
004-01	--	--	--	0.01	--
005-01	--	--	--	0.04	--
006-01	negligible	--	--	--	--
Total	9	56.7	52	2.2	574.8

2000 Facility Hazardous Air Pollutant Emissions

Pollutant	Hazardous Air Pollutant Emissions in Tons/Year
Hydrogen Chloride	6.65
Hydrogen Fluoride	22.3
Antimony Compounds	0.5
Beryllium Compounds	7.8E-4
Cadmium Compounds	0.4
Hydrogen Bromide	95.9
Lead Compounds	5.1E-3
Dioxins/Furans	4.0E-6
Mercury	3.2E-3
Arsenic Compounds	0.1

EMISSION UNIT APPLICABLE REQUIREMENTS

Municipal Waste Combustor Equipment Requirements – (Emission Units 001-01, 001-02, 002-01, 002-02, 003-01 and 003-02)

Limitations

The following applicable limitations are State BACT requirements from Conditions 4 through 26, 172, 173, 178, 182 and 183 of the major PSD Permit issued on February 4, 2002. A copy of the permit is attached as attachment B.

Condition 4: PM emissions from the municipal waste combustors shall be controlled by fabric filters.

Conditions 5 and 6: Approved fuel for the municipal waste combustors are municipal waste and fuel oil number 2. No. 2 fuel oil shall be used as an auxiliary fuel during low Btu firing condition and light-off.

Condition 6A: No.2 fuel oil shall not exceed a sulfur limit of 0.5%.

Condition 7: Firing of the municipal waste combustor with fuel oil shall not exceed an annual capacity factor of 10%.

Condition 8: No. 2 fuel burners shall be used to maintain appropriate furnace temperatures.

Condition 9: Emission concentration limits for PM, CO, SO_2, NO_x, HCl, cadmium, lead, mercury and dioxin/furans for each municipal waste combustor (MWC). The NO_x and CO emission concentration limits are based on the facility's MWCs being mass burn waterwall MWCs, which are defined as a field-erected combustor that combusts municipal solid waste in a waterwall furnace. A waterwall furnace is defined as a combustion unit having energy (heat) recovery in the furnace (i.e. radiant heat transfer section) of the combustor.

Condition 10: Emission limits for PM, CO, SO_2, VOC, NO_x, HCl, MWC Metals, MWC acid gases, cadmium, lead, mercury, dioxin/furans and beryllium for each municipal waste combustor.

Condition 11: Total emission limits for PM, CO, SO_2, VOC, NO_x, HCl, MWC Metals, MWC acid gases, cadmium, lead, mercury, dioxin/furans and beryllium from the MWC plant.

Condition 12: Visible emission limit of 10% opacity (6-minute average) for each municipal waste combustor.

Condition 13: Fugitive dust/emission standards for each municipal waste combustor and the ash conveying systems.

Condition 13A: PM emission concentration limit for each MWC of 0.18 grams per dry standard cubic meter, corrected to 12% CO_2.

Condition 14: Annual steam production limit of 1.12 million tons

Condition 15: Four-hour average steam load level shall not operate greater than 110% of the maximum demonstrated municipal waste combustor (MWC) unit load.

Condition 16: Four-hour average temperature, measured at each fabric filter, shall not exceed 17°C (30.6°F) above the maximum demonstrated fabric filter temperature.

Condition 17 – 26: Operator training and certification requirements for MWC units.

Condition 172 – 173: Startup, shutdown and malfunction provisions for MWC units. MWC unit capacity.

Condition 178: Not a RCRA permit.

Condition 182: Facility or control equipment malfunction requirements for hazardous air pollutant processes such as the MWC units.

Condition 183: Ambient Air Quality Standard

The following specific emission requirements in the Code of Federal Regulations have been determined to be applicable:

40 CFR 60.42b(j), Standard for SO_2 for Steam Generating Units. The facility shall combust only very low sulfur oil with a maximum sulfur content of 0.5%.

40 CFR 60.43b, Standard for PM for Steam Generating Units. According to 40 CFR 60.43b(d)(1), the facility shall not exceed 0.1 lb PM / MMBtu and a 10% annual capacity factor is required for No. 2 fuel oil.

40 CFR 60.44b, Standard for NO_x for Steam Generating Units. The municipal waste combustors are exempt from the NO_x limits in NSPS Subpart Db. This is because each municipal waste combustor has a federally enforceable 10% annual capacity limit for No. 2 fuel oil.

40 CFR 60.52, Standard for PM for Incinerators. The facility is subject to a particulate matter emission limit of 0.18 g/dscm (0.08 gr/dscf) corrected to 12% CO_2.

40 CFR 61, Subpart C – National Emission Standard for Beryllium. Covanta does not believe this regulation is applicable to the facility because they say beryllium containing waste is not accepted by the facility and they cite an EPA Region IV guidance letter dated April 6, 2000 and the attachment memo dated July 16, 1979 regarding beryllium. Thus, Covanta Alexandria/Arlington, Inc. did not include it as an applicable requirement in their Title V application. The VA DEQ believes the beryllium NESHAP is still applicable and will be included in their Title V permit unless:

- The DEQ receives letters from all Covanta's customers (waste generators) that there is not any beryllium in their waste; or
- Covanta writes a letter to EPA Region III requesting a variance and a variance is granted; or
- Covanta writes a letter to EPA Region III asking if they concur with the memo from Region IV and the attachment memo dated July 16, 1979. If Region III agrees, the VA DEQ would need a letter from Covanta stating that they do not accept waste from foundries, extraction plants, ceramic plants or propellant plants.

Monitoring

The monitoring requirements in Conditions 115 through 135 of the PSD permit meet Part 70 periodic monitoring requirements. These permit conditions are based on New Source Performance Standards (NSPS), 40 CFR 60, proposed after November 15, 1990. The permit conditions cite 40 CFR 62 Subpart FFF – Federal Plan Requirements for Large Municipal Waste Combustors constructed on or before September 20, 1994. 40 CFR 62, Subpart FFF implements the Emission Guidelines, including emission limits, operating practice requirements, operator training & certification requirements and compliance & performance testing requirements. These emission limits & requirements are the same as those in the Emission Guidelines (40 CFR 60, Subpart Cb). Standards of Performance for Municipal Waste Combustors, Rule 4-46 of the state regulations was not cited because it has not been approved into the 111d plan and is not federally enforceable. Additional monitoring conditions have been added to account for NSPS Subpart Db and E and 40 CFR 61, Subpart C.

The permittee will monitor the differential pressure drop across each fabric filter on an ongoing basis. The continuous opacity monitor will be used as an indicator of proper operation of the fabric filter.

A continuous emission monitoring system (CEMS) shall be installed, calibrated, maintained and operated to record the output of the system by measuring the oxygen or carbon dioxide content of the flue gas at each location where CO, SO_2 or NO_x are monitored. A CEMS for CO shall be installed, calibrated, maintained and operated at the combustor outlet to record the output of the system. The continuous monitoring system requirements for NO_x, SO_2 and opacity are listed in the testing section because Rule 4-46 of the SAPCB Regulations classifies it under the testing and procedures section.

To determine compliance with MWC load level requirements there is a steam flow meter to measure steam in kg/hr (kilopounds/hr) on a continuous basis and record the output of the monitor. Steam flow shall be calculated in 4-hour block arithmetic averages. All signal conversion elements associated with steam measurements must be calibrated before each dioxin/furan test and at least once per year.

To determine compliance with the maximum particulate matter control device temperature requirements there is a device to measure on a continuous basis the temperature of the flue gas stream at the inlet to each particulate matter control device. Temperature shall be calculated in 4 hour block arithmetic averages.

The following appropriate requirements in the Code of Federal Regulations have been determined to be applicable:

40 CFR 60.48b, Emission monitoring for PM for Steam Generating Units.

40 CFR 60.53, Monitoring of operations for Incinerators.

Recordkeeping

Recordkeeping requirements for the MWCs are listed in Conditions 137 through 151 of the PSD permit. The following records are required to be maintained:

- The emission concentrations and parameters measured using CEMS.

- When any of the average emission concentrations, percent reduction, operating parameters, or the opacity are above applicable limits, the calendar dates, reason for exceedence and description of corrective action taken.
- Average carbon mass feed rate during all annual performance tests for mercury, for each hour of operation, calendar quarter. The average carbon mass feed rate shall be based on a 6-hour average or the total sampling time of the most recent annual performance test for mercury.
- Calendar dates for which the minimum number of hours of SO_2, NO_x and CO emissions data, MWC unit load data and PM control device temperature data were not obtained along with reasons for not obtaining data and description of corrective action.
- Each occurrence where SO_2, NO_x and CO emissions data, MWC unit load data and PM control device temperature data were excluded from the calculation of average emission concentration or parameters and the reasons for excluding the data.
- Results of daily drift test and quarterly accuracy determinations for SO_2, NO_x and CO CEMS.
- Results of all annual performance tests.
- Operator training and certification records.
- Calendar dates of when the average activated carbon mass feed rated are less than the hourly activated carbon mass feed rates estimated during the performance tests for mercury emissions with reasons for such feed rated and a description of corrective action taken.
- Calendar dates of when the activated carbon injection system operating parameters are below the levels estimated during the performance tests with reasons for occurrences and a description of corrective action.
- Format of records
- Amount of No. 2 fuel oil used as auxiliary fuel in each of the furnace/municipal waste combustors.

The following appropriate requirements in the Code of Federal Regulations have been determined to be applicable:

40 CFR 60.49b, Recordkeeping Requirements for Steam Generating Units.

40 CFR 60.53, Records for Incinerators.

Testing

Continuous emission monitoring systems (CEMS) for NO_x and SO_2 shall be installed, calibrated, maintained and operated at the combustor outlet to record the output of the system. A continuous opacity monitoring system (COMS) shall be installed, calibrated, maintained and operated to measure opacity.

Following the date the initial performance tests for SO_2, NO_x, CO, PM, cadmium, lead, mercury, dioxins/furans, hydrogen chloride and fugitive ash emissions are completed, a performance test on an annual basis shall be conducted (no more than 12 calendar months following the previous performance test). Beryllium testing shall be conducted annually also. All performance tests shall consist of a minimum of three test runs conducted under representative full load operating conditions. The average of the three test runs will be used to determine compliance.

If performance tests over a 2 year period indicate dioxin/furan emissions less than 15 ng/dscm for all MWC units, the owner may choose to conduct dioxin/furan performance tests for one MWC unit a year. At minimum a performance test for dioxin/furan for one MWC unit shall be tested annually. Each year a different MWC unit will be tested in sequence. If any annual performance test, indicates emission levels greater than 15 ng/dscm of dioxin/furans, dioxin/furan performance tests shall be conducted on all MWC units.

According to EPA document No. 0106-00-002-002 "Municipal Waste Combustion: Background Document for Federal Plan – Public Comments and Responses," page 9-1, the carbon injection feed rate established during the performance test is not an instantaneous average. The baseline carbon feed rate is based on the average feed rate during the mercury (or dioxin) performance test. At the Covanta Alexandria/Arlington, Inc. facility activated carbon is used primarily to control mercury. The total sampling time for the initial performance test for mercury was 6 hours. The total sampling time for the performance test for dioxin/furans is 12 hours. So, the DEQ included in the permit that the carbon mass feed rate should be based on a 6-hour average or the total sampling time of the most recent annual performance test for mercury.

Method 1 shall be used to select the sampling site and number of traverse points. Method 3, 3A or 3B, as applicable, shall be used for gas analysis. Alternative methods as approved by the DEQ on a case-by-case basis may be used.

Pollutant	Test Method (40 CFR Part 60, Appendix A)
VOC	EPA Methods 18, 25, 25a
NO_x	EPA Method 19
SO_2	EPA Method 19
CO	EPA Methods 10, 10a, 10b
PM/PM-10	EPA Method 5
Visible Emission	EPA Method 9
Fugitive Ash	EPA Method 22
Dioxin/Furan	EPA Method 23
Hydrogen Chloride	EPA Methods 26, 26a
Cadmium	EPA Method 29
Lead	EPA Method 29
Beryllium	EPA Method 29
Mercury	EPA Method 29

The Department and EPA have the authority to require additional testing not included in this permit if necessary to determine compliance with an emission limit or standard.

The following appropriate requirements in the Code of Federal Regulations have been determined to be applicable:

40 CFR 60.46b, Testing Requirements for PM for Steam Generating Units.

40 CFR 60.54, Testing Requirements for Incinerators.

Reporting

The permit includes requirements to submit excess emission reports, annual and semi-annual reports. The reports required by 40 CFR 60.49b shall also be submitted.
The annual report shall include:

- Annual emissions and a certification of compliance with facility annual permit mass emission limitations.
- Demonstrate compliance with all the lb/MMBtu and lb/hr emission limitations, or for HCl, SO_2 and mercury the percent removal requirements.
- Document that actual CO emissions have not increased more than 99 tons/yr from an average of 1998 & 1999 facility wide actual CO emissions of 46.5 tons/yr calculated on a cumulative basis.

The semi-annual report shall include:

- PM, opacity, cadmium, lead, mercury, dioxins/furans, hydrogen chloride, and fugitive ash emission levels during performance tests
- Highest emission level recorded for SO_2, NO_x, CO, MWC unit load level and particulate matter control device temperature data
- Highest opacity level measured
- Total number of days the minimum number of hours of data for SO_2, NO_x, CO, MWC unit load level and particulate matter control device temperature were not obtained.
- Total number of hours that data for SO_2, NO_x, CO, MWC unit load level and particulate matter control device temperature were excluded from the calculation of average emission concentrations or parameters.
- Submit additional information if any recorded pollutant or parameter does not comply with the pollutant or parameter limit specified in this permit.
- Carbon injection system operating parameters that indicate carbon mass feed rate.

General Comments

The municipal waste combustor (MWC) federal plan (40 CFR Part 62, Subpart FFF) implements the emission guidelines (40 CFR Part 60, Subpart Cb) for MWC units not covered by an EPA approved and currently effective State Plan. Because this federal plan was adopted in lieu of a State plan, it contains the same elements required by 40 CFR part 60, subparts B and Cb. Rule 4-46, Standards of Performance for Municipal Waste Combustors, of the Commonwealth of Virginia State Air Pollution Control Board's (SAPCB's) Regulations for the Control and Abatement of Air Pollution has not been approved by EPA.

Requirements for Storage Silos – (Emission Units 004-01 and 005-01)

Limitations

The following applicable limitations are requirements from Condition 4A, 10A and 13A of the major PSD Permit issued on February 4, 2002. A copy of the permit is attached as attachment B.

Condition 4A: Particulate matter emissions from the carbon and lime silos shall be controlled by fabric filters.

Condition 10A: Particulate matter emission limit.

Condition 12A: Visible emission limit of 20% opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 30% opacity.

Monitoring

There is no monitoring for the visible emission requirement for the storage silos. Operation of the storage silos with fabric filters that have been properly maintained should not cause an exceedence of the visible emission limit.

Testing

This section of the permit does not require source tests. A table of test methods has been included in this section of the permit if testing is performed. The Department and EPA have authority to require testing not included in this permit if necessary to determine compliance with an emission limit or standard.

Requirements for Storage Tank – (Emission Unit 006-01)

Recordkeeping

The permit includes requirements for maintaining records of the dimension of the storage vessel and an analysis showing the capacity of the storage vessel.

Facility Wide Conditions

Reporting
The permittee shall notify the DEQ of the intention to shutdown or bypass air pollution control equipment for necessary scheduled maintenance, which results in excess emissions for more than one-hour, at least 24-hours prior to shutdown.

STREAMLINED REQUIREMENTS

The following conditions in the PSD permit have not been included for the reasons provided:

Condition 19 has not been included. The requirement listed in 9 VAC 5-40-8130C is not referenced in 40 CFR 62, Subpart FFF. Since the State Regulations are not federally enforceable, this condition was removed from the Title V permit.

Conditions 35, 56, 63, 70, 80, 86, 95 and 108 have not been included. Initial performance tests for SO_2, NO_x, CO, PM, cadmium, lead, mercury, dioxins/furans, hydrogen chloride and fugitive ash emissions have already been performed.

Condition 105 requires that the procedures in Conditions 106 through 109 be used to determine compliance with the fugitive ash emission limit. Condition 105 has not been included because the

other referenced permit conditions are self-explanatory and can be used to determine compliance with the fugitive ash emission limit.

Condition 115 has not been included. The requirements of 9 VAC 5-40-40 are already covered in the monitoring section of the permit. A permit condition was added that the permittee shall comply with the applicable general provisions of 40 CFR 60.

Condition 119 has not been included. The initial performance tests have already been performed.

Condition 124 requires that the procedures in Conditions 125 through 135 be used to determine compliance with the CO emission concentration limit. Condition 124 has not been included because the other referenced permit conditions can be used for credible compliance determinations.

Condition 125 has not been included because the 4-hour block arithmetic average requirement for CO is already incorporated into the emission concentration limit permit condition (PSD permit condition 9).

Condition 136 has not been included. The recordkeeping and reporting requirements of 9 VAC 5-40-50 are already covered in the permit except for 9 VAC 5-40-50B. A permit condition was added citing 9 VAC 5-40-50B, which requires that the permittee shall maintain records of startup, shutdown or malfunction. Another permit condition was added citing 9 VAC 5-40-50.A.2, which requires that the permittee shall submit notification to the DEQ 30 days in advance of a proposed emission test that will be used to comply with an emissions standard.

Condition 170 has not been included. The initial performance test report has already been submitted.

Condition 171, which references 9 VAC 5-40-20 has not been included. 9 VAC 5-40-20.A.3 is not included in the SIP and therefore cannot be referenced or cited in Title V permits. 9 VAC 5-50-20 is cited in General Condition O of the permit and addresses startup, shutdown and malfunction requirements.

Condition 174 states that 40 CFR 62 Subpart FFF applies to the extent it does not conflict with Rule 4-46 of State Regulations. Since Rule 4-46 has not been approved and incorporated into the 111d plan and is not federally enforceable, this permit condition was not included.

Condition 175 has not been included. The compliance schedule listed in 40 CFR 62.14108 has past and been achieved.

Condition 176 has not been included. The compliance schedule for the municipal waste combustor operator training and certification requirements have past and been achieved.

Condition 188 has not been included. The requirements in the disclaimer condition are already covered in the Title V permit. A generic condition was included which requires that the permittee shall comply with all the applicable requirements of 40 CFR 60 Subpart Db and E; 40 CFR 61 Subpart C; and 40 CFR 62 Subpart FFF and the applicable general provisions of 40 CFR 60, 61 and 62. General Condition R.1 – Reopening for Cause addresses that the Title V permit can be reopened prior to expiration if additional applicable federal requirements become applicable to a major source with a remaining permit term of three years or more.

The following NSPS requirements have not been included for the reasons provided:

40 CFR 60.43b(d)(1) – NSPS Subpart Db requires that the emissions from each municipal waste combustor unit shall not exceed 0.10 lb PM / MMBtu. This NSPS Subpart Db requirement was not included in the permit because Condition 10 of the PSD permit was included which requires a more stringent PM emission limit of 0.07 lb/MMBtu.

40 CFR 60.43b(f) – NSPS Subpart Db requires that the opacity from the municipal waste combustors shall not exhibit greater than 20% opacity (6-minute average), except for one 6-minute period per hour of not more than 27% opacity. This NSPS Subpart Db requirement was not included in the permit because the 40 CFR 62 Subpart FFF requirement of 10% opacity (6-minute average) was included and is more stringent.

40 CFR 61.32(a) – NESHAP Subpart C requires that beryllium emissions for each municipal waste combustor not exceed 10 grams over a 24-hour period. 10 grams over a 24 hour period is equivalent to 9.17E-4 lb/hr based on a 24-hour period and 2.75E-3 lb/hr based on an 8-hour operating period. This NESHAP Subpart C requirement was not included in the permit because Condition 10 of the PSD permit was included which requires a more stringent emission limit of 6.0E-5 lb/hr.

The following Virginia State Air Pollution Control Board (SAPCB) Regulations have not been included for the reasons provided:

9 VAC 5-40-80 was not included. This SAPCB Regulation requires that visible emissions shall not exceed 20% opacity, except for one six-minute period in any one hour of not more than 60% opacity. 40 CFR 62.14103(a)(1) requires 10% opacity (6-minute average) shall not be exceeded. This 40 CFR 62, Subpart FFF requirement was included in the permit because it is more stringent than 9 VAC 5-40-80.

GENERAL CONDITIONS

The permit contains general conditions required by 40 CFR Part 70 and 9 VAC 5-80-110, that apply to all Federal operating permit sources. These include requirements for submitting semi-annual monitoring reports and an annual compliance certification report. The permit also requires notification of deviations from permit requirements or any excess emissions, including those caused by upsets, within one business day.

Comments on General Conditions

B: Permit Expiration

This condition refers to the Board taking action on a permit application. The Board referred to is the State Air Pollution Control Board. The authority to take action on permit application(s) has been delegated to the Regions as allowed by ??2.1-20.01:2 and '?10.1-1185 of the *Code of Virginia,* and the "Department of Environmental Quality Agency Policy Statement NO. 3-2001".

This general conditions cites the entire Article(s) that follow:

B.2. Article 1 (9 VAC 5-80-50 et seq.), Part II of 9 VAC 5 Chapter 80. Federal Permits for Stationary Sources
B.3. Article 1 (9 VAC 5-80-50 et seq.), Part II of 9 VAC 5 Chapter 80. Federal Permits for Stationary Sources

This general condition cites the sections that follow:

B.	9 VAC 5-80-80. "Application"
B.2.	9 VAC 5-80-150. "Action on Permit Applications"
B.3.	9 VAC 5-80-80. "Application"
B.4.	9 VAC 5-80-80. "Application"
B.4.	9 VAC 5-80-140. "Permit shield"
B.5.	9 VAC 5-80-80. "Application"

F. Malfunction as an Affirmative Defense

Section 9 VAC 5-20-180 requires malfunction and excesses emissions reporting within 4 hours. Section 9 VAC 5-80-250 also requires malfunction reporting; however, reporting is required within 2 days. Section 9 VAC 5-20-180 is from the general regulations. All affected facilities are subject to this section including Title 5 facilities. Section 9 VAC 5-80-250 is from the Title 5 regulations. Title 5 facilities are subject to both Sections. A facility may make a single report that meets the requirements of 9 VAC 5-20-180 and 9 VAC 5-80-250. The report must be made within 4 day time business hours of the malfunction.

An additional sentence will be added to this condition referencing that excess emissions for NO_x, SO_2 and CO for more than one hour shall be based on the averaging period in PSD Permit Condition #9 and the emission limits in PSD Permit Condition #10.

Please note there are two proposed regulation changes that could affect this condition. The requirement listed in section 9 VAC 5-20-180 to report excesses emissions within 4 business hours may be changed to require reporting of excess emissions within 6 hours. The requirement listed in section 9 VAC 5-40-50 C and 9 VAC 5-50-50 C to submit a written report of excess emissions on a quarterly basis may be changed to allow semiannual reporting.

In order for emission units to be relieved from the requirement to make a written report in 14 days the emission units must have continuous monitors and the continuous monitors must meet the requirements of 9 VAC 5-50-410 or 9 VAC 5-40-41.

This general condition cites the sections that follow:

F.	9 VAC 5-40-50.	Notification, Records and Reporting
F.	9 VAC 5-50-50.	Notification, Records and Reporting
F.1.	9 VAC 5-40-50.	Notification, Records and Reporting
F.1.	9 VAC 5-50-50.	Notification, Records and Reporting
F.2.	9 VAC 5-40-50.	Notification, Records and Reporting
F.2.	9 VAC 5-50-50.	Notification, Records and Reporting
F.3.	9 VAC 5-40-50.	Notification, Records and Reporting
F.3.	9 VAC 5-40-41.	Emissions Monitoring Procedures for Existing Sources
F.3.a.	9 VAC 5-40-41.	Emissions Monitoring Procedures for Existing Sources

This general condition contains a citation from the Code of Federal Regulations as follows:

F.2.a. 40 CFR 60.13 (h). Monitoring Requirements.

U: Malfunction as an Affirmative Defense

The regulations contain two reporting requirements for malfunctions that coincide. The reporting requirements are listed in section 9 VAC 5-80-250 and 9 VAC 5-20-180. The malfunction requirements are listed in General Condition U and General Condition F. For further explanation see the comments on general condition F.

This general condition cites the sections that follow:

U.2.d. 9 VAC 5-80-110. Permit Content
U.2.d. 9 VAC 5-20-180. Facility and Control Equipment Maintenance or Malfunction

FUTURE APPLICABLE REQUIREMENTS

There are no future applicable requirements at this time.

INAPPLICABLE REQUIREMENTS

The requirements of 40 CFR Part 60, Subpart Ea are not currently applicable to this facility because the facility was not constructed between December 20, 1989 and September 20, 1994.

New Source Performance Standard (NSPS) requirements, for Large Municipal Waste Combustors for which construction is commenced after September 20, 1994, or for which modification or reconstruction is commenced after June 19, 1996, in 40 CFR Part 60, Subpart Eb, are not currently applicable to the facility. According to NSPS Subpart Cb, physical or operational changes made to an existing municipal waste combustor unit primarily for the purposes of complying with NSPS Subpart Cb are not considered in determining whether the unit is a modified or reconstructed facility under NSPS Subpart Eb.

National Emission Standards for Hazardous Air Pollutants (NESHAP) for Mercury in 40 CFR Part 63, Subpart E, are not currently applicable to the facility. Covanta Alexandria/Arlington does not incinerate wastewater treatment plant sludge.

No inapplicable requirements were identified by the applicant in the permit application.

COMPLIANCE PLAN

Covanta of Alexandria/Arlington, Inc. is currently in compliance with all applicable requirements. No compliance plan was included in the application or in the proposed permit.

INSIGNIFICANT EMISSION UNITS

The insignificant emission units are presumed to be in compliance with all requirements of the Clean Air Act as may apply. Based on this presumption, no monitoring, recordkeeping or reporting shall be required for these emission units in accordance with 9 VAC 5-80-110.

Insignificant emission units include the following:

Emission Unit No.	Emission Unit Description	Citation[1]	Pollutants Emitted (9 VAC 5-80-720 B)	Rated Capacity (9 VAC 5-80-720 C)
IU-1	MSW Building/Pit	9 VAC 5-80-720B	PM, PM_{10} and VOC	N/A
IU-2	Ash Building	9 VAC 5-80-720B	PM, PM_{10}, SO_2, HCl, Cd, Pb and Hg	N/A
IU-3	Water Heater	9 VAC 5-80-720C.2	N/A	199,999 Btu/hr
IU-4	Emergency Diesel Generator	9 VAC 5-80-720C.4	N/A	230 KW

[1]The citation criteria for insignificant activities are as follows:
9 VAC 5-80-720 A - Listed Insignificant Activity, Not Included in Permit Application
9 VAC 5-80-720 B - Insignificant due to emission levels
9 VAC 5-80-720 C - Insignificant due to size or production rate

CONFIDENTIAL INFORMATION

The permittee did not submit a request for confidentiality. All portions of the Title V application are suitable for public review.

PUBLIC PARTICIPATION

A public notice regarding the draft permit was published in the August 13, 2001 edition of The Washington Times. The public comment period was from August 13, 2001 through September 12, 2001. No public comments on the draft permit were received. A public hearing was not held.

Attachment A

2000 Permit Application Emissions Inventory

Attachment B

PSD permit dated February 4, 2002